

Plug N' Play

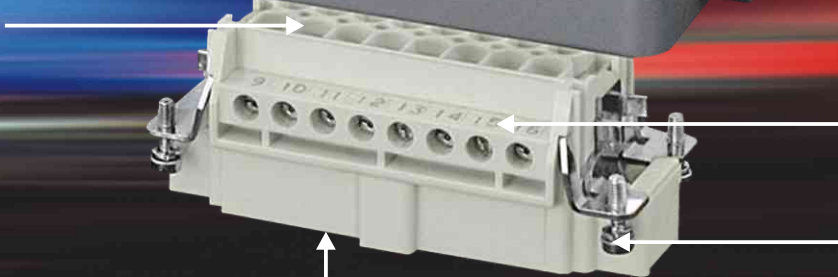


Die Cast Aluminium Hood with Epoxy Polyester powder coated finish



Cable Glands with Pg / Metric threads

Male insert in Glass Fibre Reinforced Thermoplastic Material



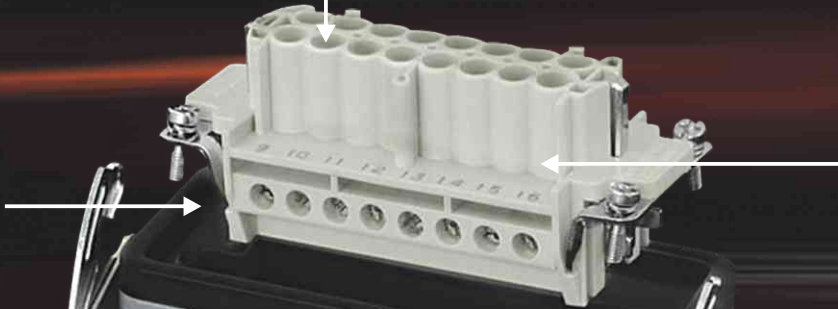
Laser printed or moulded contact terminal marking

Silver plated brass male & female contacts



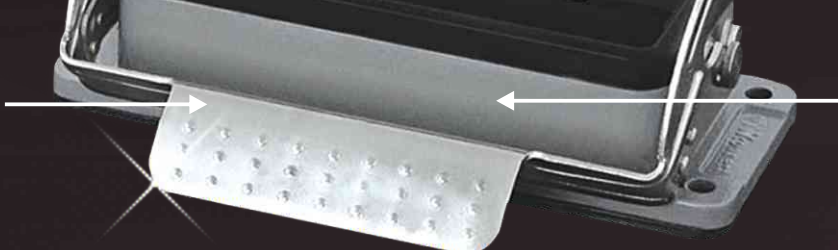
Stainless Steel Captive screws for mounting

Vinyl Nitrile Elastomer Sealing Gasket



Female insert in Glass Fibre Reinforced Thermoplastic Material

Monoblock Galvanized Steel / Stainless Steel spring loaded lever



Housings available in Bulk Head Mount / Surface Mount designs



COMPACT SQUARE TYPE

MALE INSERTS



Suitable for 3 A type enclosure with a size of 21 x 21 these inserts provide for the most compact connections and are available from 3 to 12 poles.

Technical Details :	
Insulation Material	Polycarbonate
Contact Material	Silver-Plated Copper Alloy
Flammability	UL 94 V0
Temperature Range	-40° C to +125° C
Approvals	UL CE

Male Inserts

Cat. No. Male Insert	No. of Poles	Current Rating Amp	Voltage Rating Volt	Wire Size sq.mm	Connection Type
W03MT/10A3	3 + ⊕	10	230 / 400	0.5 - 2.5	Screw
W04MT/10A3	4 + ⊕	10	230 / 400	0.5 - 2.5	Screw
W05MCC/16A3	5 + ⊕	16	230 / 400	0.14 - 2.5	Crimp Contact
W07MCC/10A3/250	7 + ⊕	10	250	0.14 - 2.5	Crimp Contact
W08MCC/10A3	8	10	50	0.14 - 2.5	Crimp Contact
W12MCC/10A3	12+ ⊕	10	400	0.14 - 2.5	Crimp Contact



COMPACT SQUARE TYPE

FEMALE INSERTS



Suitable for 3 A type enclosure with a size of 21 x 21 these inserts provide for the most compact connections and are available from 3 to 12 poles.

Technical Details :	
Insulation Material	Polycarbonate
Contact Material	Silver-Plated Copper Alloy
Flammability	UL 94 V0
Temperature Range	-40° C to +125° C
Approvals	UL CE

Female Inserts

Cat. No. Female Insert	No. of Poles	Current Rating Amp	Voltage Rating Volt	Wire Size sq.mm	Connection Type
W03FT/10A3	3 + ⊕	10	230 / 400	0.5 - 2.5	Screw
W04FT/10A3	4 + ⊕	10	230 / 400	0.5 - 2.5	Screw
W05FCC/16A3	5 + ⊕	16	230 / 400	0.14 - 2.5	Crimp Contact
W07FCC/10A3/250	7 + ⊕	10	250	0.14 - 2.5	Crimp Contact
W08FCC/10A3	8	10	50	0.14 - 2.5	Crimp Contact
W12FCC/10A3	12+ ⊕	10	400	0.14 - 2.5	Crimp Contact



These hoods are suitable for housing compact square type male or female inserts. They are available with options of top wire entry, side wire entry and top wire entry with lever for cable to cable connection.

Technical Details :	
Material	Die cast Alluminium alloy Thermoplastic- Polyamide
Protection Class	IP 65
Voltage	For Inserts upto 500V
Thread	Pg, Metric
Gasket	Vinyl Nitrite Elastomer (NBR)
Size of Enclosure	3A / 21 x 21

COMPACT SQUARE

TYPE HOODS



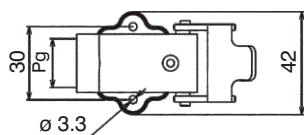
Cat. No. Plastic	Cat. No. Metal	Cable Gland Size	Type of Wire Entry
W3/4CTPP11	W3/4CTMP11	Pg 11	Top
W3/4CSPP11	W3/4CSMP11	Pg 11	Side
W3/4CTPLP11	W3/4CTMLP11	Pg 11	Top Entry with Lever
W3/4CTPM20	W3/4CTMM20	M 20 X 1.5	Top
W3/4CSPM20	W3/4CSMM20	M 20 X 1.5	Side
W3/4CTPLM20	W3/4CTMLM20	M 20 X 1.5	Top Entry with Lever



These surface mount housings are suitable for housing compact square type male or female inserts. They are available with side wire entry option only.

Technical Details :	
Material	Die cast Alluminium alloy Thermoplastic- Polyamide
Protection Class	IP 65
Voltage	For Inserts upto 500V
Thread	Pg, Metric
Gasket	Vinyl Nitrite Elastomer (NBR)
Size of Enclosure	3A / 21 x 21

Dimensions (mm)



COMPACT SQUARE TYPE

SURFACE MOUNT HOUSINGS



Cat. No. Plastic	Cat. No. Metal	Cable Gland Size
W3/4HSPP11	W3/4HSMP11	Pg 11
W3/4HSPM20	W3/4HSMM20	M 20 x 1.5



COMPACT SQUARE TYPE

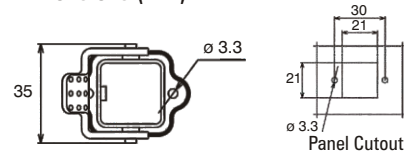
BULK HEAD MOUNT STRAIGHT HOUSINGS



These bulk head mounting type straight housings are suitable for hoods which are connected perpendicular to the mounting surface. They can house male or female compact square type inserts.

Technical Details :	
Material	Die cast Alluminium alloy Thermoplastic - Polyamide
Protection Class	IP 65
Voltage	For Inserts upto 500V
Gasket	Vinyl Nitrite Elastomer (NBR)
Size of Enclosure	3A / 21 x 21

Dimensions (mm)



Cat. No. Plastic	Cat. No. Metal
W3/4HBSP	W3/4HBSM



COMPACT SQUARE TYPE

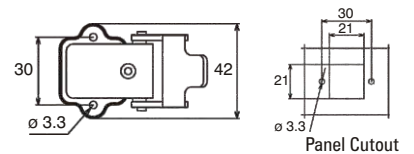
BULK HEAD MOUNT RIGHT ANGLED HOUSINGS



These bulk head mounting type right angled housings are suitable for hoods which are connected parallel to the mounting surface. They can house male or female compact square type inserts.

Technical Details :	
Material	Die cast Alluminium alloy Thermoplastic- Polyamide
Protection Class	IP 65
Voltage	For Inserts upto 500V
Gasket	Vinyl Nitrite Elastomer (NBR)
Size of Enclosure	3A / 21 x 21

Dimensions (mm)



Cat. No. Plastic	Cat. No. Metal
W3/4HBRP	W3/4HBRM



These inserts are available from 4 to 48 poles. These are polarized to prevent incorrect coupling between the male and the female inserts. The screw terminals are provided with wire protectors to prevent damage to the conductors.

Technical Details :	
Insulation Material	Polycarbonate
Contact Material	Silver Plated Copper Alloy
Flammability	UL 94 V0
Temperature Range	-40 ^o C to +125 ^o C
Approvals	

SCREW TERMINAL TYPE RECTANGULAR

MALE AND FEMALE INSERTS



Male Inserts

Cat. No.	No. of Poles + ⊕	Current Rating Amp		Voltage Rating Volt		Wire Size sq.mm		Enclosure Size (mm)	Suitable Enclosure Type
W04MT/80B16	4	80		500		1.5 - 16.0		77 x 27	16B
W06MT/16B6	6	16		500		0.5 - 4.0		44 x 27	6B
W06MT/35B16	6	35		830		1.5 - 6.0		77 x 27	16B
W10MT/16A10	10	16		250		0.5 - 4.0		49 x 16	10A
W10MT/16B10	10	16		500		0.5 - 4.0		57 x 27	10B
W12MT/35B32	12	35		830		1.5 - 6.0		77 x 62	32B
W16MT/16A16	16	16		250		0.5 - 4.0		66 x 16	16A
W16MT/16B16	16	16		500		0.5 - 4.0		77 x 27	16B
W24MT/16B24	24	16		500		0.5 - 4.0		104 x 27	24B
W32MT/16A32	32	16		250		0.5 - 4.0		66 x 40	32A
W32MT/16B32	32	16		500		0.5 - 4.0		77 x 62	32B
W48MT/16B48	48	16		500		0.5 - 4.0		104 x 62	48B
W(4/2)MT/(80/16)B16	6 (4+2)	Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6	77 x 27	16B
		80	16	500	830	1.5 - 16.0	0.5 - 4.0		
W(4/8)MT/(80/16)B24	12 (4+8)	Pins 1-4	Pins 5-12	Pins 1-4	Pins 5-12	Pins 1-4	Pins 5-12	104 x 27	24B
		80	16	500	830	1.5 - 16.0	0.5 - 4.0		

Female Inserts

Cat. No.	No. of Poles + ⊕	Current Rating Amp		Voltage Rating Volt		Wire Size sq.mm		Enclosure Size (mm)	Suitable Enclosure Type
W04FT/80B16	4	80		500		1.5 - 16.0		77 x 27	16B
W06FT/16B6	6	16		500		0.5 - 4.0		44 x 27	6B
W06FT/35B16	6	35		830		1.5 - 6.0		77 x 27	16B
W10FT/16A10	10	16		250		0.5 - 4.0		49 x 16	10A
W10FT/16B10	10	16		500		0.5 - 4.0		57 x 27	10B
W12FT/35B32	12	35		830		1.5 - 6.0		77 x 62	32B
W16FT/16A16	16	16		250		0.5 - 4.0		66 x 16	16A
W16FT/16B16	16	16		500		0.5 - 4.0		77 x 27	16B
W24FT/16B24	24	16		500		0.5 - 4.0		104 x 27	24B
W32FT/16A32	32	16		250		0.5 - 4.0		66 x 40	32A
W32FT/16B32	32	16		500		0.5 - 4.0		77 x 62	32B
W48FT/16B48	48	16		500		0.5 - 4.0		104 x 62	48B
W(4/2)FT/(80/16)B16	6 (4+2)	Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6	Pins 1-4	Pins 5-6	77 x 27	16B
		80	16	500	830	1.5 - 16.0	0.5 - 4.0		
W(4/8)FT/(80/16)B24	12 (4+8)	Pins 1-4	Pins 5-12	Pins 1-4	Pins 5-12	Pins 1-4	Pins 5-12	104 x 27	24B
		80	16	500	830	1.5 - 16.0	0.5 - 4.0		



RECTANGULAR FEMALE CONTACT CARRIERS

FOR CRIMP CONTACTS



These inserts are available from 6 to 216 poles. These are polarized to prevent incorrect coupling between the male and the female inserts. The conductors need to be crimped with appropriate female crimp contacts and then made to enter the insert where they are held in place with the help of a flexible locking device.

Technical Details :	
Insulation Material	Polycarbonate
Contact Material	Silver-Plated Copper Alloy
Flammability	UL 94 V0
Wire Size	0.14 - 4.0 sq.mm.
Temperature Range	-40° C to +125° C
Approvals	UL CE

Cat. No.	No. of Poles + ⊕	Current Rating Amp	Voltage Rating Volt	Enclosure Size (mm)	Suitable Enclosure Type
W6FCC/16B6	6	16	500	44 x 27	6B
W10FCC/16A10	10	16	250	49 x 16	10A
W10FCC/16B6	10	16	500	44 x 27	6B
W10FCC/16B10	10	16	500	57 x 27	10B
W15FCC/10A10	15	10	250	49 x 16	10A
W16FCC/16A16	16	16	250	66 x 16	16A
W16FCC/16B16	16	16	500	77 x 27	16B
W18FCC/16B10	18	16	500	57 x 27	10B
W24FCC/10B6	24	10	250	44 x 27	6B
W24FCC/16B24	24	16	500	104 x 27	24B
W25FCC/10A16	25	10	250	66 x 16	16A
W32FCC/16A32	32	16	250	66 x 40	32A
W32FCC/16B16	32	16	500	77 x 27	16B
W32FCC/16B32	32	16	500	77 x 62	32B
W40FCC/10B16	40	10	250	77 x 27	16B
W42FCC/10B10	42	10	250	57 x 27	10B
W46FCC/16B24	46	16	500	104 x 27	24B
W48FCC/16B48	48	16	500	104 x 62	48B
W50FCC/10A32	50	10	250	66 x 40	32A
W64FCC/10B24	64	10	250	104 x 27	24B
W64FCC/16B32	64	16	500	77 x 62	32B
W72FCC/10B16	72	10	250	77 x 27	16B
W80FCC/10B32	80	10	250	77 x 62	32B
W92FCC/16B48	92	16	500	104 x 62	48B
W108FCC/10B24	108	10	250	104 x 27	24B
W128FCC/10B48	128	10	250	104 x 62	48B
W144FCC/10B32	144	10	250	77 x 62	32B
W216FCC/10B48	216	10	250	104 x 62	48B



These inserts are available from 6 to 216 poles. These are polarized to prevent incorrect coupling between the male and the female inserts. The conductors need to be crimped with appropriate male crimp contacts and then made to enter the insert where they are held in place with the help of a flexible locking device.

Technical Details :	
Insulation Material	Polycarbonate
Contact Material	Silver Plated Copper Alloy
Flammability	UL 94 V0
Wire Size	0.14 - 4.0 sq.mm.
Temperature Range	-40° C to +125° C
Approvals	

RECTANGULAR MALE CONTACT CARRIERS

FOR CRIMP CONTACTS



Cat. No.	No. of Poles + ⊕	Current Rating Amp	Voltage Rating Volt	Enclosure Size (mm)	Suitable Enclosure Type
W6MCC/16B6	6	16	500	44 x 27	6B
W10MCC/16A10	10	16	250	49 x 16	10A
W10MCC/16B6	10	16	500	44 x 27	6B
W10MCC/16B10	10	16	500	57 x 27	10B
W15MCC/10A10	15	10	250	49 x 16	10A
W16MCC/16A16	16	16	250	66 x 16	16A
W16MCC/16B16	16	16	500	77 x 27	16B
W18MCC/16B10	18	16	500	57 x 27	10B
W24MCC/10B6	24	10	250	44 x 27	6B
W24MCC/16B24	24	16	500	104 x 27	24B
W25MCC/10A16	25	10	250	66 x 16	16A
W32MCC/16A32	32	16	250	66 x 40	32A
W32MCC/16B16	32	16	500	77 x 27	16B
W32MCC/16B32	32	16	500	77 x 62	32B
W40MCC/10B16	40	10	250	77 x 27	16B
W42MCC/10B10	42	10	250	57 x 27	10B
W46MCC/16B24	46	16	500	104 x 27	24B
W48MCC/16B48	48	16	500	104 x 62	48B
W50MCC/10A32	50	10	250	66 x 40	32A
W64MCC/10B24	64	10	250	104 x 27	24B
W64MCC/16B32	64	16	500	77 x 62	32B
W72MCC/10B16	72	10	250	77 x 27	16B
W80MCC/10B32	80	10	250	77 x 62	32B
W92MCC/16B48	92	16	500	104 x 62	48B
W108MCC/10B24	108	10	250	104 x 27	24B
W128MCC/10B48	128	10	250	104 x 62	48B
W144MCC/10B32	144	10	250	77 x 62	32B
W216MCC/10B48	216	10	250	104 x 62	48B



These male and female crimp contacts are available in 10 Amp and 16 Amp versions. The 10 Amp crimp contacts are suitable for conductor size upto 2.5 sq.mm. and the 16 Amp crimp contact are suitable for conductor size upto 4 sq.mm.

Female Crimp Contacts

Male Crimp Contacts



MALE & FEMALE CRIMP CONTACTS

FOR CONTACT CARRIERS

Technical Details :	
Material	Turned / Machined Copper Alloy
Surface Material	Hard Silver
Current Capacity	10 A and 16 A

Female Crimp Contacts

Cat. No.	Current Capacity Amp	Wire Size in sq.mm	Dia A / No. of Grooves	Stripping Length mm
WFCT0.37/10A	10	0.14 - 0.37	0.90 mm	8
WFCT0.5/10A	10	0.5	1.10 mm	8
WFCT0.75/10A	10	0.75	1.30 mm	8
WFCT1.0/10A	10	1.0	1.45 mm	8
WFCT1.5/10A	10	1.5	1.75 mm	8
WFCT2.5/10A	10	2.5	2.25 mm	6
WFCT0.37/16A	16	0.14 - 0.37	0 No.	7.5
WFCT0.5/16A	16	0.5	0 No.	7.5
WFCT0.75/16A	16	0.75	1 No.	7.5
WFCT1.0/16A	16	1.0	1 No.	7.5
WFCT1.5/16A	16	1.5	2 No.	7.5
WFCT2.5/16A	16	2.5	3	7.5
WFCT3.0/16A	16	3.0	1 Wide No.	7.5
WFCT4.0/16A	16	4.0	0 No.	7.5

Male Crimp Contacts

Cat. No.	Current Capacity Amp	Wire Size in sq.mm	Dia A / No. of Grooves	Stripping Length mm
WMCT0.37/10A	10	0.14 - 0.37	0.90 mm	8
WMCT0.5/10A	10	0.5	1.10 mm	8
WMCT0.75/10A	10	0.75	1.30 mm	8
WMCT1.0/10A	10	1.0	1.45 mm	8
WMCT1.5/10A	10	1.5	1.75 mm	8
WMCT2.5/10A	10	2.5	2.25 mm	6
WMCT0.37/16A	16	0.14 - 0.37	0 No.	7.5
WMCT0.5/16A	16	0.5	0 No.	7.5
WMCT0.75/16A	16	0.75	1 No.	7.5
WMCT1.0/16A	16	1.0	1 No.	7.5
WMCT1.5/16A	16	1.5	2 No.	7.5
WMCT2.5/16A	16	2.5	3 No.	7.5
WMCT3.0/16A	16	3.0	1 Wide No.	7.5
WMCT4.0/16A	16	4.0	0 No.	7.5



These hoods are suitable for conductors which run perpendicular to the surface on which the appropriate hood and housing are mounted. The spring loaded single locking system ensures a perfect mating between the male and the female inserts while providing them with IP 65 protection.

Technical Details :	
Material	Die cast Alluminium alloy
Protection Class	IP 65
Voltage	For Inserts upto 500V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

HOODS (TOP ENTRY)

WITH 2 PEGS / 1 LEVER



Cat. No. For Hood with 2 Pegs	Cat. No. For Hood with 1 Lever	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W06CT1P13/B6	-	6B	44 x 27	Pg 13.5
W06CT1P16/B6	WR06CT1P16/B6	6B	44 x 27	Pg 16
W06CT1M20/B6	WR06CT1M20/B6	6B	44 x 27	M 20 x 1.5
W10CT1P13/A10	-	10A	49 x 16	Pg 13.5
W10CT1M20/A10	-	10A	49 x 16	M 20 x 1.5
W10CT1P16/B10	WR10CT1P16/B10	10B	57 x 27	Pg 16
W10CT1M25/B10	WR10CT1M25/B10	10B	57 x 27	M 20 x 1.5
W16CT1P16/A16	-	16A	66 x 16	Pg 16
W16CT1M20/A16	-	16A	66 x 16	M 20 x 1.5
W16CT1M25/A16	-	16A	66 x 16	M 25 x 1.5
W16CT1P21/B16	WR16CT1P21/B16	16B	77 x 27	Pg 21
W16CT1M25/B16	WR16CT1M25/B16	16B	77 x 27	M 25 x 1.5
W24CT1P21/B24	WR24CT1P29/B24	24B	104 x 27	Pg 21
W24CT1M32/B24	WR24CT1M32/B24	24B	104 x 27	M 32 x 1.5
W32HCT1P36/B32	-	32B	77 x 62	Pg 36
W48HCT1P36/B48	-	48B	104 x 62	Pg 36
W48HCT1M50/B48	-	48B	104 x 62	M 50 x 1.5



HOODS (SIDE ENTRY)

WITH 2 PEGS



These hoods are suitable for conductors which run parallel to the surface on which the appropriate hood and housing are mounted. The spring loaded single locking system ensures a perfect mating between the male and the female inserts while providing them with IP 65 protection.

Technical Details :	
Material	Die cast Aluminium alloy
Protection Class	IP 65
Voltage	For Inserts upto 500V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

Cat. No.	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W06CS1P13/B6	6B	44 x 27	Pg 13.5
W06CS1P16/B6	6B	44 x 27	Pg 16
W06CS1M20/B6	6B	44 x 27	M 20 x 1.5
W10CS1P16/A10	10A	49 x 16	Pg 16
W10CS1M20/A10	10A	49 x 16	M 20 x 1.5
W10CS1P16/B10	10B	57 x 27	Pg 16
W10CS1M25/B10	10B	57 x 27	M 25 x 1.5
W16CS1P16/A16	16A	66 x 16	Pg 16
W16CS1M20/A16	16A	66 x 16	M 20 x 1.5
W16CS1P21/B16	16B	77 x 27	Pg 21
W16CS1M25/B16	16B	77 x 27	M 25 x 1.5
W24CS1P21/B24	24B	104 x 27	Pg 21
W24CS1P29/B24	24B	104 x 27	Pg 29
W24CS1M32/B24	24B	104 x 27	M 32 x 1.5
W32HCS1P36/B32	32B	77 x 62	Pg 36
W48HCS1P29/B48	48B	104 x 62	Pg 29
W48HCS1P36/B48	48B	104 x 62	Pg 36
W48HCS1M50/B48	48B	104 x 62	M 50 x 1.5



These hoods are suitable for conductors which run perpendicular to the surface on which the appropriate hood and housing are mounted. The spring loaded double locking system ensures a perfect mating between the male and the female inserts even if accidentally one of the locks opens up.

Technical Details :	
Material	Die cast Alluminium alloy
Protection Class	IP 65
Voltage	For Inserts upto 830V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

HOODS (TOP ENTRY)

WITH 4 PEGS / 2 LEVERS



Cat. No. For Hood with 4 Pegs	Cat. No. For Hood with 2 Lever	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W10CT2P16/B10	WR10CT2P16/B10	10B	57 x 27	Pg 16
W10CT2M20/B10	WR10CT2M20/B10	10B	57 x 27	M 20 x 1.5
W16CT2P21/B16	WR16CT2P21/B16	16B	77 x 27	Pg 21
W16CT2M25/B16	WR16CT2M25/B16	16B	77 x 27	M 25 x 1.5
W24CT2P21/B24	-	24B	104 x 27	Pg 21
W24CT2P29/B24	WR24CT2P29/B24	24B	104 x 27	Pg 29
W24CT2M32/B24	WR24CT2M32/B24	24B	104 x 27	M 32 x 1.5
W32HCT2P29/A32	-	32A	66 x 40	Pg 29
W32HCT2M32/A32	-	32A	66 x 40	M 32 x 1.5
W32HCT2P29/B32	-	32B	77 x 62	Pg 29
W32HCT2P36/B32	-	32B	77 x 62	Pg 36



These hoods are suitable for conductors which run parallel to the surface on which the appropriate hood and housing are mounted. The spring loaded double locking system ensures a perfect mating between the male and the female inserts even if accidentally one of the locks opens up.

Technical Details :	
Material	Die cast Alluminium alloy
Protection Class	IP 65
Voltage	For Inserts upto 830V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

HOODS (SIDE ENTRY)

WITH 4 PEGS



Cat. No.	Enclosure Type	Enclosure Size (mm)	Cable Gland Size
W10CS2P16/B10	10B	57 x 27	Pg 16
W16CS2P21/B16	16B	77 x 27	Pg 21
W16CS2M25/B16	16B	77 x 27	M 25 x 1.5
W24CS2P21/B24	24B	104 x 27	Pg 21
W24CS2P29/B24	24B	104 x 27	Pg 29
W24CS2M32/B24	24B	104 x 27	M 32 x 1.5
W32HCS2P21/A32	32A	66 x 40	Pg 21
W32HCS2M32/A32	32A	66 x 40	M 32 x 1.5
W32HCS2M32/B32	32A	77 x 62	M 32 x 1.5
W32HCS2P29/B32	32B	77 x 62	Pg 29
W32HCS2P36/B32	32B	77 x 62	Pg 36



Surface mount type housings are used where a cable terminates into the male or female insert housed inside it. i.e. It is mounted on a plain surface with a cable coming into the housing via a cable gland mounted on the body of the housing. In this case a single lock mechanism ensures IP 65 class protection to the inserts after mating with the appropriate hood.



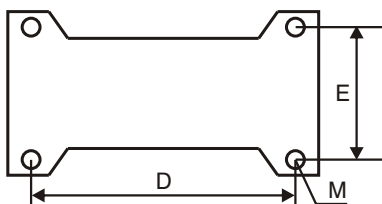
SURFACE MOUNT HOUSINGS

WITH 1 LEVER

Technical Details :	
Material	Die cast Aluminium alloy
Protection Class	IP 65
Voltage	For Inserts upto 500V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

Cat. No.	Enclosure Type	Enclosure Size (mm)	Cable Gland Size	D (mm)	E (mm)	M (Ømm)
W06HS1P16/B6	6B	44 x 27	Pg 16	70	40	4.5
W06HS1M20/B6	6B	44 x 27	M 20 x 1.5	70	40	4.5
W10HS1P16/A10	10A	49 x 16	Pg 16	48	40	3.5
W10HS1M20/A10	10A	49 x 16	M 20 x 1.5	48	40	3.5
W10HS1P16/B10	10B	57 x 27	Pg 16	82	40	4.5
W10HS1M20/B10	10B	57 x 27	M 20 x 1.5	82	40	4.5
W16HS1P21/A16	16A	66 x 16	Pg 21	64	40	3.5
W16HS1M25/A16	16A	66 x 16	M 25 x 1.5	64	40	3.5
W16HS1P21/B16	16B	77 x 27	Pg 21	105	45	4.5
W16HS1M25/B16	16B	77 x 27	M 25x 1.5	105	45	4.5
W24HS1P21/B24	24B	104 x 27	Pg 21	132	45	4.5
W24HS1M25/B24	24B	104 x 27	M 25 x 1.5	132	45	4.5
W32HS1P29/B32	32B	77 x 62	Pg 29	112	67	5.5
W32HS1M40/B32	32B	77 x 62	M 40 x 1.5	112	67	5.5
W32HS1P36/B32	32B	77 x 62	Pg 36	112	67	5.5
W32HS1M50/B32	32B	77 x 62	M 50 x 1.5	112	67	5.5
W48HS1P29/B48	48B	104 x 62	Pg 29 x 2	111	106	4.5
W48HS1P36/B48	48B	104 x 62	Pg 36 x 2	111	106	4.5
W48HS1M50/B48	48B	104 x 62	(M 50 x 1.5) x 2	111	106	4.5

Hole Drilling Dimension





Surface mount type housings are used where a cable terminates into the male or female insert housed inside it. i.e. It is mounted on a plain surface with a cable coming into the housing via a cable gland mounted on the body of the housing. In housings with covers, the cover closes over the opening of the housing when the hood is disconnected from the housing. IP 65 protection is ensured by the single locking mechanism.

Technical Details :	
Material	Die cast Alluminium alloy
Protection Class	IP 65
Voltage	For Inserts upto 500V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

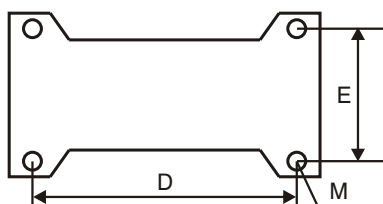
SURFACE MOUNT HOUSINGS

WITH 1 LEVER & COVER



Cat. No.	Enclosure Type	Enclosure Size (mm)	Cable Gland Size	D (mm)	E (mm)	M (Ømm)
W06HSC1P16/B6	6B	44 x 27	Pg 16	70	40	4.5
W06HSC1M20/B6	6B	44 x 27	M 20 x 1.5	70	40	4.5
W10HSC1P16/A10	10A	49 x 16	Pg 16	48	40	3.5
W10HSC1M20/A10	10A	49 x 16	M 20 x 1.5	48	40	3.5
W10HSC1P16/B10	10B	57 x 27	Pg 16	82	40	4.5
W10HSC1M20/B10	10B	57 x 27	M 20 x 1.5	82	40	4.5
W16HSC1P21/A16	16A	66 x 16	Pg 21	64	40	3.5
W16HSC1M25/A16	16A	66 x 16	M 25 x 1.5	64	40	3.5
W16HSC1P21/B16	16B	77 x 27	Pg 21	105	45	4.5
W16HSC1M25/B16	16B	77 x 27	M 25x 1.5	105	45	4.5
W24HSC1P21/B24	24B	104 x 27	Pg 21	132	45	4.5
W24HSC1M25/B24	24B	104 x 27	M 25 x 1.5	132	45	4.5
W32HSC1P29/B32	32B	77 x 62	Pg 29	112	67	5.5
W32HSC1M40/B32	32B	77 x 62	M 40 x 1.5	112	67	5.5
W32HSC1P36/B32	32B	77 x 62	Pg 36	112	67	5.5
W32HSC1M50/B32	32B	77 x 62	M 50 x 1.5	112	67	5.5
W48HSC1P29/B48	48B	104 x 62	Pg 29 x 2	111	106	4.5
W48HSC1P36/B48	48B	104 x 62	Pg 36 x 2	111	106	4.5
W48HSC1M50/B48	48B	104 x 62	(M 50 x 1.5) x 2	111	106	4.5

Hole Drilling Dimension





Surface mount type housings are used where a cable terminates into the male or female insert housed inside it. i.e. It is mounted on a plain surface with a cable coming into the housing via a cable gland mounted on the body of the housing. In this case the double locking mechanism ensures IP 65 class protection to the inserts even if one of the locks accidentally opens up.

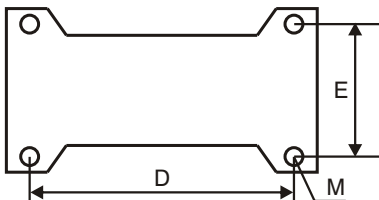
SURFACE MOUNT HOUSINGS

WITH 2 LEVERS / 4 PEGS

Technical Details :	
Material	Die cast Aluminium alloy
Protection Class	IP 65
Voltage	For Inserts upto 500V
Thread	Pg, Metric
Gasket	Vinyl Nitrile Elastomer (NBR)

Cat. No. For Housing with 2 Levers	Cat. No. For Housing with 4 Pegs	Enclosure Type	Enclosure Size (mm)	Cable Gland Size	D (mm)	E (mm)	M (Ømm)
W10HS2P16/B10	-	10B	57 x 27	Pg 16	82	40	4.5
W10HS2M20/B10	WR10HS2M20/B10	10B	57 x 27	M 20 x 1.5	82	40	4.5
W16HS2P21/B16	-	16B	77 x 27	Pg 21	105	45	4.5
W16HS2M25/B16	WR16HS2M25/B16	16B	77 x 27	M 25 x 1.5	105	45	4.5
W24HS2P21/B24	-	24B	104 x 27	Pg 21	132	45	4.5
W24HS2M25/B24	WR24HS2M25/B24	24B	104 x 27	M 25 x 1.5	132	45	4.5
W32HS2P29/A32	-	32A	66 x 40	Pg 29	94	46	5.5
W32HS2M32/A32	-	32A	66 x 40	M 32 x 1.5	94	46	5.5
W32HS2P36/B32	-	32B	77 x 62	Pg 36	112	67	5.5
W32HS2M40/B32	WR32HS2M40/B32	32B	77 x 62	M 40 x 1.5	112	67	5.5
W32HS2P42/B32	-	32B	77 x 62	Pg 42	112	67	5.5
W32HS2M50/B32	-	32B	77 x 62	M 50 x 1.5	112	67	5.5

Hole Drilling Dimension



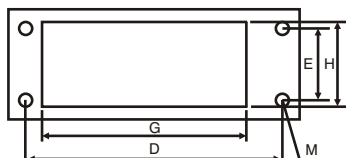


Bulk head mount housings are mounted over cut-outs in the electrical control panels where the conductors approach the inserts fixed inside the housings through the cut-outs.

Technical Details :

Material	Die cast Alluminium alloy
Protection Class	IP 65
Voltage	For Inserts upto 500V
Gasket	Vinyl Nitrile Elastomer (NBR)

Panel Cutout


BULK HEAD MOUNT HOUSINGS
WITH 1 LEVER


Cat. No.	Enclosure Type	Enclosure Size (mm)	D (mm)	E (mm)	G (mm)	H (mm)	M (Ømm)
W06HB1/B6	6B	44 x 27	70	32	53	36	4.5
W10HB1/A10	10A	49 x 16	70	17.5	57	24	3.5
W10HB1/B10	10B	57 x 27	83	32	66.5	36	4.5
W16HB1/A16	16A	66 x 16	86	17.5	73	24	3.5
W16HB1/B16	16B	77 x 27	103	32	86.5	36	4.5
W24HB1/B24	24B	104 x 27	130	32	113	36	4.5
W32HB1/B32	32B	77 x 62	110	65	87.5	76.5	5.5
W48HB1/B48	48B	104 x 62	148	70	122.5	79.5	5.5

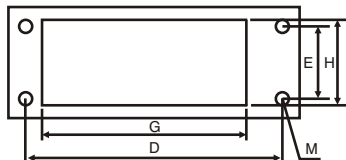


In this case the bulk head mount housings are provided with a hinged cover which closes over the housing in the absence of the hood to be mounted on it.

Technical Details :

Material	Die cast Alluminium alloy
Protection Class	IP 65
Voltage	For Inserts upto 500V
Gasket	Vinyl Nitrile Elastomer (NBR)

Panel Cutout


BULK HEAD MOUNT HOUSINGS
WITH 1 LEVER & COVER


Cat. No.	Enclosure Type	Enclosure Size (mm)	D (mm)	E (mm)	G (mm)	H (mm)	M (Ømm)
W06HBC1/B6	6B	44 x 27	70	32	53	36	4.5
W10HBC1/A10	10A	49 x 16	70	17.5	57	24	3.5
W10HBC1/B10	10B	57 x 27	83	32	66.5	36	4.5
W16HBC1/A16	16A	66 x 16	86	17.5	73	24	3.5
W16HBC1/B16	16B	77 x 27	103	32	86.5	36	4.5
W24HBC1/B24	24B	104 x 27	130	32	113	36	4.5
W32HBC1/B32	32B	77 x 62	110	65	87.5	76.5	5.5
W48HBC1/B48	48B	104 x 62	148	70	122.5	79.5	5.5



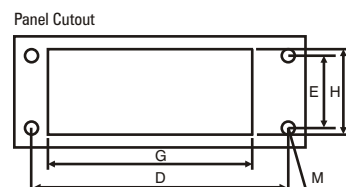
BULK HEAD MOUNT HOUSINGS

WITH 2 LEVERS / 4 PEGS AND GASKET



In this case the bulk head mount housings are provided with double locking mechanisms which ensure IP 65 class protection even in the case of one lock accidentally opening up.

Technical Details :	
Material	Die cast Alluminium alloy
Protection Class	IP 67
Voltage	For Inserts upto 500V
Gasket	Vinyl Nitrile Elastomer (NBR)



Cat. No. For Housing with 2 Levers	Cat. No. For Housing with 4 Pegs	Enclosure Type	Enclosure Size (mm)	D (mm)	E (mm)	G (mm)	H (mm)	M (Ømm)
W10HB2/B10	WR10HB2/B10	10B	57 x 27	83	32	66.5	36	4.5
W16HB2/B16	WR16HB2/B16	16B	77 x 27	103	32	86.5	36	4.5
W24HB2/B24	WR24HB2/B24	24B	104 x 27	130	32	113	36	4.5
W32HB2/A32	-	32A	66 x 40	92	42	75	58.6	4.5
W32HB2/B32	WR32HB2/B32	32B	77 x 62	110	65	87.5	76.5	5.5



METAL CABLE GLANDS FOR

MULTIPOLE INDUSTRIAL CONNECTOR



These cable glands provide IP 65 protection and are available in a wide range of Pg threads. For Metric threaded enclosures Controlwell's range of standard cable glands can be utilized. For complete list of cable glands with Metric & Pg threads refer pages 4 to 8 of this catalogue.

Technical Details :	
Material	Nickel-Plated Brass
Washer	Zinc-Plated Steel
Gasket	Elastomer
Protection Class	IP 65
Threads	Pg, Metric

Cat. No.	Size	(mm)	Cable Clamping Range (mm)
WCG03	Pg 11	18	7 - 12
WCG04	Pg 13.5	20	7 - 12
WCG05	Pg 16	22	7 - 14.5
WCG06	Pg 21	28	9.5 - 18.5
WCG07	Pg 29	37	17.5 - 26.5
WCG08	Pg 36	47	23.5 - 32.5
WCG09	Pg 42	54	29.5 - 38.5

Application:

- For MIC Hoods and Housings with Pg Threads.
- For other sealed enclosures and boxes to protect parts of mechanism and equipment from external influence

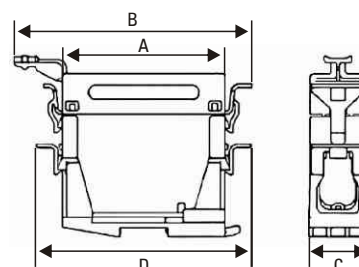
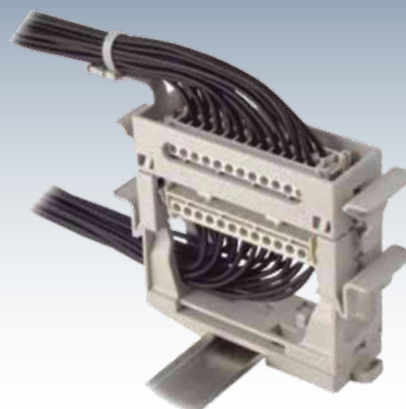


DIN Rail supports are used for housing of high connection density contact carriers or inserts within control cabinets / panels. No tools are needed for installing these products. The inserts / contact carriers can be snapped into the DIN Rail supports with hands. Also the DIN Rail supports can be snapped on to the DIN Rails without tools. These DIN Rail supports are fully cross compatible with inserts of other makes. The inserts and hence the contacts are fully secured by locking the male inserts with the female inserts. This is achieved by using locking levers.

Technical Details :	
Material	Polycarbonate
Colour	Grey
Flammability	UL-94 V0
Mounting on	DIN 35 Rail (7.5 mm & 15 mm Deep)
Approvals	CE RoHS

DIN RAIL SUPPORTS

FOR INSERTS SIZE "B"

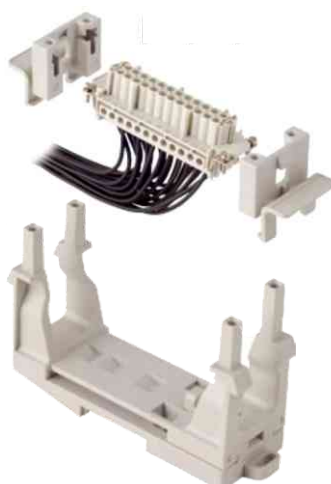


Cat. No.	Enclosure Type	Enclosure Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)
WDIN/B6	6B	44 x 27	57	113.3	42	146
WDIN/B10	10B	57 x 27	70	126	42	146
WDIN/B16	16B	77 x 27	90.6	146.3	42	146
WDIN/B24	24B	104 x 27	117	173	42	146

Top Support Assembly



Base Support Assembly



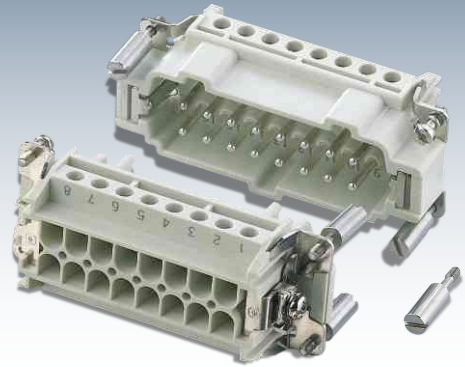


In various applications a bank (group) of male or female identical connectors are placed side by side. In such applications it is difficult to couple the connectors in the right sequence.

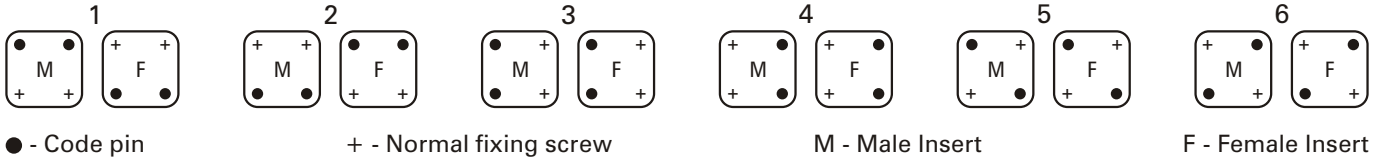
Coding pins are used to prevent such false coupling possibilities. Coding pins are used in place of normal insert fixing screws. In this way coupling of correct connectors is ensured.

Single code pins offer coding possibilities for a maximum of 6 identical connectors placed side by side.

SINGLE CODE PINS



Application with single code pins for 6 connectors side by side



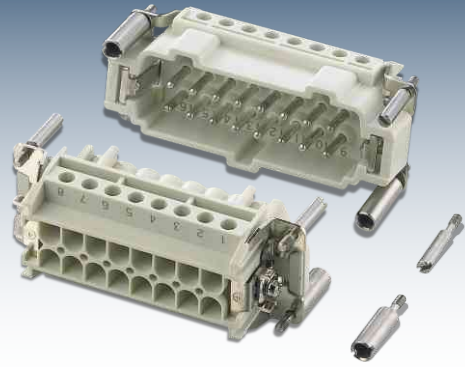
Cat. No.	Type	Material		
WCPS	Single Code Pin	Zinc Plated Steel		



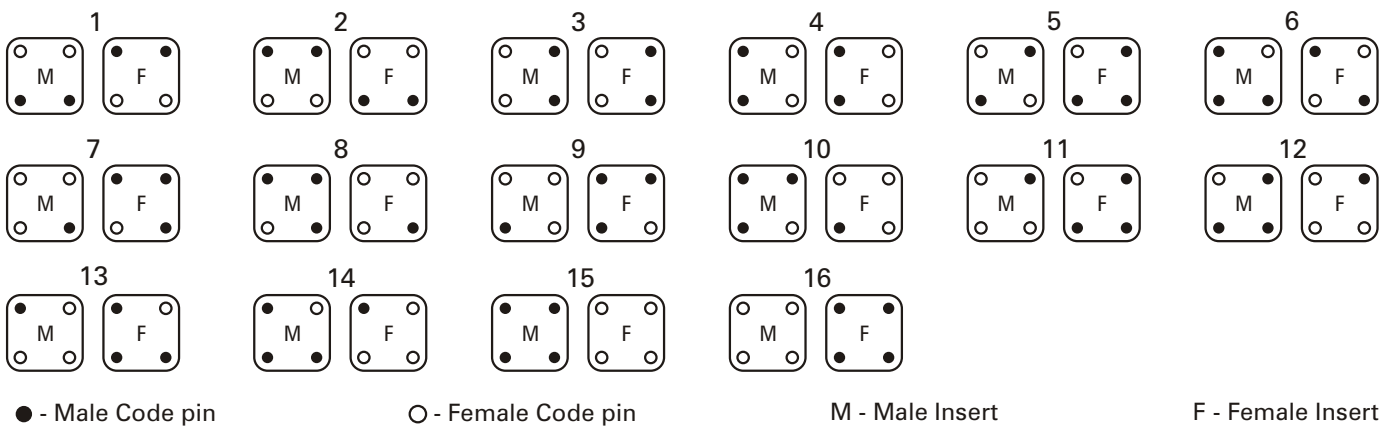
Coding pins are used to prevent false coupling between male & female inserts. To codify more than 6 identical connectors placed besides each other it is necessary to use double code pins.

Double code pins are available in a combination of Male & Female code pins. By using Double code pins a maximum of 16 identical connectors can be codified.

DOUBLE CODE PINS



Application with double code pin for 16 connectors side by side



Cat. No.	Type	Material		
WCPDM	Double Code Pin Male	Zinc Plated Steel		
WCPDF	Double Code Pin Female	Zinc Plated Steel		

GENERAL SPECIFICATIONS FOR MULTIPOLE INDUSTRIAL CONNECTORS

INSERTS:

- Made from self-extinguishing glass fibre reinforced thermoplastic resin UL 94 V0, GMT 960°.
- Temperature range from -40° C to +125° C.
- Silver plated brass contacts to ensure low contact resistance.
- The screw terminals are provided with captive screws in stainless steel to prevent corrosion.
- Contact number (pin) marking by laser printing or moulding.
- Suitable for use with alternate or direct current
- Polarized by provision of asymmetric guide rails hence preventing incorrect mating.
- Inter changeability for male and female inserts in hoods and housing
- Captive screws with anti-loosening washers for fitting into the enclosure.
- Rated for mechanical working life equal to or greater than 500 mating cycles.
- Connection technologies possible include : screw terminals, crimp terminals and screw terminals housed in terminal blocks.
- Manufactured in conformity with EN 61984, VDE 0110, VDE 0627 standards.
- Certified and identified with UL, CSA & CE Marking.

TYPES OF CONDUCTOR TERMINATIONS:

- Screw terminals with wire protector
- Crimp terminals
- Screw terminals with Terminal Block

ENCLOSURES:

- Available in two parts 1. Hoods 2. Housings.
- Housings available in bulk head mounting design or surface mounting design.
- Die cast aluminium alloy body with epoxy-polyester powder coated finish or self-extinguishing thermoplastic body (square type).
- High resistance to impact and mechanical stress.
- Special sealing gaskets made from anti-ageing, oil-resistant and fuel resistant vinyl nitrile elastomer
- Monoblock galvanized steel or stainless steel or self extinguishing glass filled thermoplastic material closure levers guarantee a perfect closure and sealing.
- Two types of Locking arrangements, single (with one lever) or double (with 2 levers).
- IP65 Degree of protection (EN 60529)
- Electrical connection with protective ground via contact with mounting surface.
- Available with or without spring-loaded lockable metal covers or mobile covers.
- The enclosures are provided with riveted stainless steel pegs which ensure structural stability and prevent corrosion.
- Enclosures for 500 V are provided with two tabs which ensure that inserts of 830 V rating can not be fixed into them.

CABLE GLANDS:

Cable Glands with Pg threads in nickel plated brass offer IP 65 protection.

(Can be replaced with Controlwell's range of IP 68 Standard Cable Glands with Pg or Metric threads.)

CODE PINS:

Code pins protect against incorrect mating of similar series inserts.

REMARKS:

- All of the components of Multipole Industrial Connectors are RoHS compliant in accordance with European Directive 2002/95/EC
- Connectors should not be coupled and de-coupled under electrical load.

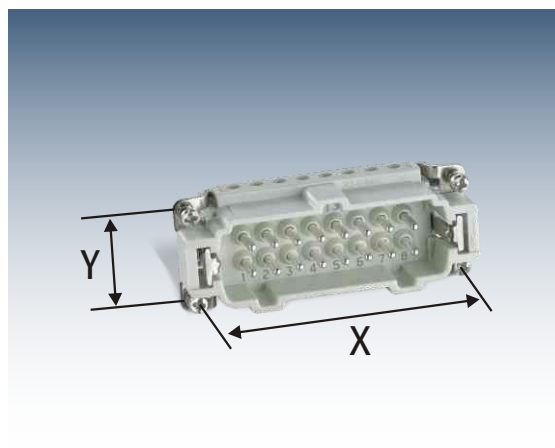
ENCLOSURE SELECTION

A large number of permutations and combinations are possible between the inserts and enclosures.

To ease the task of enclosure selection the enclosures are divided into the following types, which indicate the housing space inside them.

Enclosure Type	Housing space for inserts with screw fixing center distance x-y (mm)
3A	21 x 21 *
10A	49 x 16
16A	66 x 16
32A	66 x 40 (2 inserts)
6B	44 x 27
10B	57 x 27
16B	77 x 27
24B	104 x 27
32B	77 x 62 (2 inserts)
48B	104 x 62 (2 inserts)

* The screw fixing center distance cannot be given because this insert has only one screw.
21 x 21 indicates the size of sectioned inserts.



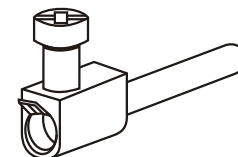
CONDUCTOR CONNECTION / TERMINATION

Three types of conductor connection / termination are possible with male and female inserts.

- SCREW TERMINALS WITH WIRE PROTECTION.
- CRIMP TERMINALS
- SCREW TERMINALS WITH WIRE PROTECTION HOUSED IN TERMINAL BLOCK.

1 - SCREW TERMINALS WITH WIRE PROTECTION.

In this case no special preparation of the conductor is required except for the stripping of insulation.



Insert Type	Max. wire size (mm ²)	Max. wire size (AWG)	Stripping Length (mm)
Compact Square Type	2.5	14	4.5
Rectangular Type	2.5	14	7

2 - CRIMP TERMINALS

A perfect crimp connection is gaslight, therefore corrosion free and amounts to a cold weld of the parts being connected. Wires to be connected must be carefully matched with the correct size of crimp contacts. If these basic requirements are met, users will be assured of highly reliable connections with low contact resistance and high resistance to corrosion.

After crimping the conductors they are inserted into the insert (without any tool) where they remain fixed in a position with the help of a flexible locking device mounted on the insert.

The removal of the conductors is made by using a flat 3 mm screw driver.

Advantages of Crimp connections

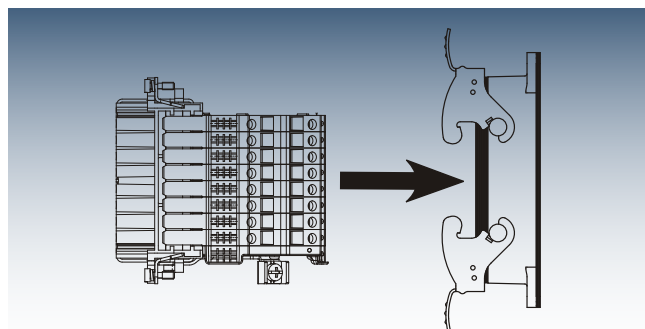
- Constant contact resistance
- Corrosion free connections as a result of cold weld action.

3 - SCREW TERMINALS WITH WIRE PROTECTION HOUSED IN TERMINAL BLOCK *

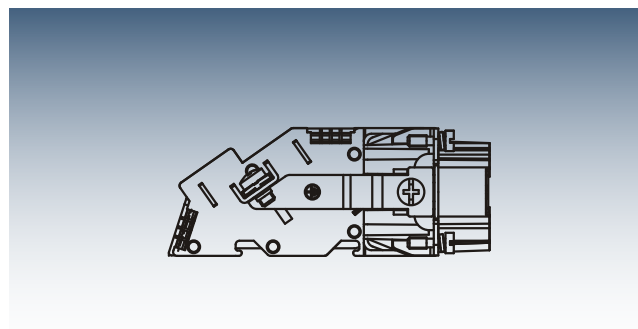
The connection to the contacts of the male and female inserts are made via screw terminals with wire protectors.

Here the inserts are provided with:

- A 45° wire entry terminal block that facilitates the wiring and the identification of the conductors.
- The terminal blocks can be panel mounted or DIN rail mounted.
- The screw terminals with wire protection prevent damage to the conductors.



Insertion of Insert with terminal block into the housing



Side view of insert with terminal block

COVERS FOR HOUSINGS *

In case housings with hinged covers are not procured initially, the covers can be separately purchased and retro fitted onto the housings. These covers help maintain the IP protection grade by closing onto the housings when the hoods are disconnected from the housings.

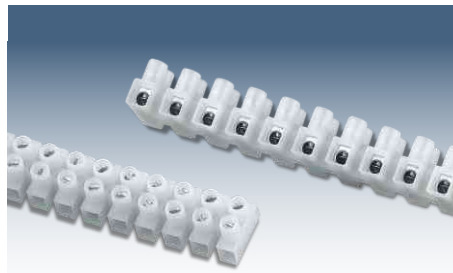


* Available on Request.

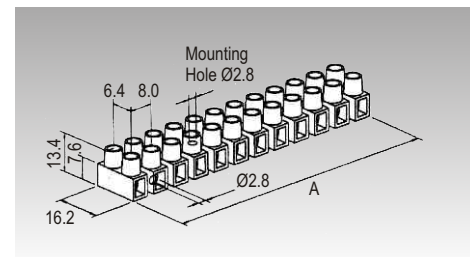




MULTIWAY STRIP CONNECTORS

These strip connectors feature tubular screw clamps and wire protectors which are actuated by a screw. They are available in 2.5, 4 & 6 sq.mm. sizes and are compact & ideal for small spaces. They can be used as free floating connectors or as panel mounted terminal blocks. Available in standard 12-pole strips these can be easily cut into combinations of smaller number of poles. Controlwell also offers pre-cut strips of any number of poles less than 12.

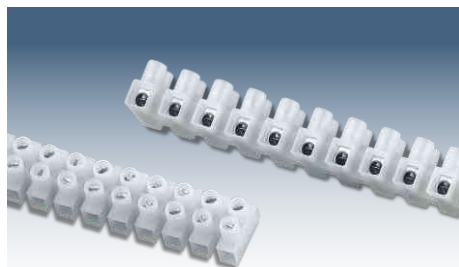


MW2NP / MW2P

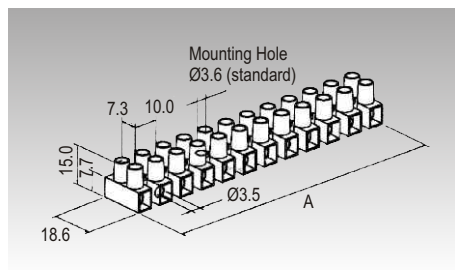


Width x Height		16.2 x 13.4 mm
Wire Clamping Range	With Wire Protector Without Wire Protector	1 - 2.5 mm ² 1 - 4 mm ² (Rigid Wire)
Wire Stripping Length		5 mm
Nominal Voltage		450 V
Rated Current	With Wire Protector Without Wire Protector	24 A 32 A
Recommended Tightening Torque		0.4 Nm
Housing Material		Polyamide 66
Insert Material		Galvanized Brass
Screw Material & Size		Galvanized Steel & M2.6
Max. Ambient Temperature	If Used in 2, 3 or 4 Pole configuration If Used in 6 or 12 Pole configuration	110° C 85° C
Approvals		CE  

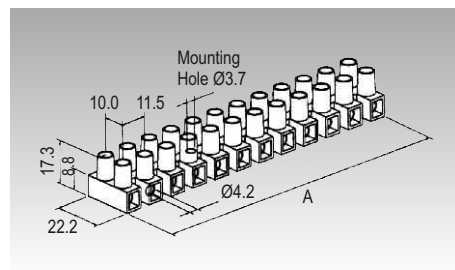
Ordering Information	Without Wire Protector		With Wire Protector		Length A
	Cat. No.	Std. Pkg.	Cat. No.	Std. Pkg.	
2 Pole	MW2NP02	300	MW2P02	300	13.6
3 Pole	MW2NP03	200	MW2P03	200	21.6
4 Pole	MW2NP04	150	MW2P04	150	29.6
6 Pole	MW2NP06	100	MW2P06	100	45.6
12 Pole	MW2NP12	50	MW2P12	50	93.6



MW4NP / MW4P



MW6NP / MW6P



Width x Height	
Wire Clamping Range	With Wire Protector Without Wire Protector
Wire Stripping Length	
Nominal Voltage	
Rated Current	With Wire Protector Without Wire Protector
Recommended Tightening Torque	
Housing Material	
Insert Material	
Screw Material & Size	
Max. Ambient Temperature	If Used in 2, 3 or 4 Pole configuration
	If Used in 6 or 12 Pole configuration
Approvals	

Width x Height	18.6 x 15 mm
Wire Clamping Range	0.5 - 4 mm ² 0.5 - 6 mm ² (Rigid Wire)
Wire Stripping Length	6 mm
Nominal Voltage	450 V
Rated Current	32 A 41 A
Recommended Tightening Torque	0.5 Nm
Housing Material	Polyamide 66
Insert Material	Galvanized Brass
Screw Material & Size	Galvanized Steel & M3
Max. Ambient Temperature	110° C
	85° C
Approvals	CE DVE CULUS

Width x Height	22.2 x 17.3 mm
Wire Clamping Range	0.5 - 6 mm ² 0.5 - 10 mm ² (Rigid Wire)
Wire Stripping Length	7.5 mm
Nominal Voltage	450 V
Rated Current	41 A 57 A
Recommended Tightening Torque	0.8 Nm
Housing Material	Polyamide 66
Insert Material	Galvanized Brass
Screw Material & Size	Galvanized Steel & M3.5
Max. Ambient Temperature	110° C
	85° C
Approvals	CE DVE CULUS

Ordering Information	Without Wire Protector		With Wire Protector		Length A
	Cat. No.	Std. Pkg.	Cat. No.	Std. Pkg.	
2 Pole	MW4NP02	150	MW4P02	150	16.3
3 Pole	MW4NP03	100	MW4P03	100	26.3
4 Pole	MW4NP04	75	MW4P04	75	36.4
6 Pole	MW4NP06	50	MW4P06	50	58.5
12 Pole	MW4NP12	25	MW4P12	25	117.0

Ordering Information	Without Wire Protector		With Wire Protector		Length A
	Cat. No.	Std. Pkg.	Cat. No.	Std. Pkg.	
2 Pole	MW6NP02	150	MW6P02	150	18.7
3 Pole	MW6NP03	100	MW6P03	100	30.1
4 Pole	MW6NP04	75	MW6P04	75	41.5
6 Pole	MW6NP06	50	MW6P06	50	66.3
12 Pole	MW6NP12	25	MW6P12	25	132.7

Ordering Information	Without Wire Protector		With Wire Protector		Length A
	Cat. No.	Std. Pkg.	Cat. No.	Std. Pkg.	
2 Pole	MW6NP02	150	MW6P02	150	18.7
3 Pole	MW6NP03	100	MW6P03	100	30.1
4 Pole	MW6NP04	75	MW6P04	75	41.5
6 Pole	MW6NP06	50	MW6P06	50	66.3
12 Pole	MW6NP12	25	MW6P12	25	132.7